Ma. Julia Carabias Lillo Secretary of Environment, Natural Resources, and Fisheries Mexico City

Since its creation in 1995, the Border XXI Program has established public participation in the monitoring and guidance of environmental management as one of its three strategies for action. In this regard, it is my pleasure to present to you the evaluation of the (aforementioned) program that the Region I Advisory Council for Sustainable Development has developed. The Advisory Council comments on the achievements and shortcomings of the program, and, most importantly, establishes short- and medium-term recommendations to guide current and future activities for binational environmental planning along the border.

The commentary represents a concrete expression of the completion of the mission for which these Advisory Councils were created: to assist, advise, and define a trajectory for Mexico's environmental policy. In this sense, the document represents a practical model of civil society's participation in monitoring public administration.

Border XXI is a binational cooperative effort between Mexico and the United States to promote sustainable development in the shared border region through nine workgroups. Five years after its inception, an assessment of the program is not only desirable, but also essential to begin to reflect upon the undertaking that, with the support of civil society, we should launch at the beginning of the new century.

Without a doubt, there have been important achievements in Border XXI. But there are also unresolved matters. The progress related to border environmental infrastructure was very significant. Thanks to the work of the Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADB), Mexico will be able to meet the Border XXI goals for the year 2000, providing 93 percent of the Mexican border population with drinking water, 75 percent with sewer systems, and 81 percent with wastewater treatment (as compared to 88 percent, 69 percent, and 34 percent, respectively, in 1995).

With regards to air, we also had concrete improvements, not only in the understanding of air quality conditions through monitoring systems, but also in the establishment of two programs for the improvement of air quality in Ciudad Juárez, Chihuahua, and Mexicali, Baja California.

As far as environmental information is concerned, I believe that, with Border XXI, Mexico made an unprecedented qualitative leap forward, with the development of environmental indicators, with the creation of a web page, and with the publication of the *Report on the State of the Environment and Natural Resources along Mexico's Northern Border*.

Also notable is the cooperation that we have undertaken with the U.S. Department of the Interior relating to natural protected areas in the border region. Each day we come closer to managing our resources as shared ecosystems.

In addition, we have also made important gains in the areas of environmental health, in monitoring the transboundary movement of hazardous wastes, and in cooperation on law enforcement.

As the Advisory Council accurately points out, there are various issues under Border XXI that received only partial attention, such as private sector participation, the topic of environmental education, marine resources, the link with scientific research, etc. These are all issues which we should address in the future.

The promotion of sustainable development is, without a doubt, a complex subject, and I am sure that the recommendations herein illustrate possible avenues for advancing this concept. It is clear that decentralization and public participation will be two essential factors.

It is evident that much remains to be done, but I believe that on balance, Border XXI is very positive and I am certain that the we can rely on our vast experience to design a framework for environmental management that will make the most of the comparative advantage of the border situation in the coming years.

The document presented here is the product of collective Advisory Council discussions. It gives form to the central objective of including public scrutiny as an indispensable part of public administration, and represents, without a doubt, a source of important guidance for future cooperative environmental actions along the Mexico-United States border.

INTRODUCTION

The Consejo Consultivo para el Desarrollo Sustentable,

Region 1 (CCDS, or council, Mexico's Region 1 Council for Sustainable Development) prepared this Border XXI Program evaluation document to outline the obstacles and accomplishments of the organizations that make up the program workgoups. Progress and deficiencies in community participation are also described herein.

As an advisory council, we recognize that the program was signed under the precepts developed at the Rio summit and its declarations that emerged as Agenda XXI, which, coupled with efforts of the U.S. and Mexico governments to improve the quality of life in the border region, initiated a process long awaited by the residents of this region.

Border XXI was introduced to the border community as a more coherent program than its predecessors. It incorporates the Secretaría del Medio Ambiente, Recursos Naturales, y Pesca (SEMARNAP, or Secretariat of Environment, Natural Resources, and Fisheries) institutional arrangement and the joint experience of the two

environmental organizations created by ancillary agreements to the North American Free Trade Agreement (NAFTA): the Border Environmental Cooperation Commission (BECC), and the North American Development Bank (NADB), to create a unique concept of community participation.

The program itself reflects the spirit of the border region with its complex cultural mix, its diverse landscapes, and the fragility of its ecosystems, natural resources, and wildlife, which demand management coordinated with the border society and the three government levels of both countries.

The challenge of Border XXI for the region's residents was also accepted by the members of this council, which, with sleeves rolled up, has worked in harmony without complacency, with the authorities, initiating in this way a transparent process of environmental management that we view as historic. It represents one of the first efforts of coordination between the governors and those governed.

This program introduces itself into recent Mexican history as one of the first democratic alternatives for environmental infrastructure development, with the use of a new man-

agement tool based on community participation. Former programs, which did not serve their purpose, generated not only a lack of credibility, but a great quantity of inappropriate infrastructure projects. The change begun by SEMARNAP has been converted to a challenge that other federal agencies have not been able to surpass, and has created expectations of change throughout Mexico's political system.

The community today is experiencing a new instrument that presents serious challenges to the previous design, and that holds as its principal objective sustainable development, that strives to strike a balance among economic interest, society's needs, and the protection of our environment.

It is important to note that the opinions expressed herein were unanimously accepted by the council's Permanent Commission on International Affairs.

We recognize the positive performance of the federal authorities responsible for environ-

mental protection in their interest in keeping the community involved, efforts we maintain represent an important accomplishment. Nevertheless, our recognition does not imply tacit approval of the program or its actions as a result of it.

This evaluation has been made possible thanks to the opportunity provided by the advisory councils and to the progress made by SEMARNAP in improving access to information and in promoting sustainable development during this current federal administration.

OVERVIEW OF THE BORDER XXI PROGRAM AND ITS RELATIONSHIP TO THE COUNCIL

The CCDS is made up of representatives from the nine northern states of the Mexican Republic: Baja California, Baja California Sur, Sonora, Sinaloa, Chihuahua, Coahuila, Durango, Nuevo León, and Tamaulipas.

Its 12 members from each state (appointed and substitutes) represent the social, academic, nonprofit, governmental, business, and legislative sectors, for a total of 54 appointed members and 54 substitutes.

The goal of this council, like that of the other four advisory councils in the country, is to guarantee a corresponding level of participation in public politics in regard to the environment, as well as to establish mechanisms for coordination, initiation, and negotiation between the authorities and society on environmental issues.

The council's functions include advising SEMARNAP on the design, implementation, and evaluation of national environmental and natural resource development strategies; proposing, evaluating, and making recommendations on environmental and natural resource development policies, programs, studies, and specific actions; and encouraging public inquiry, comment, and negotiation on national strategies necessary for sustainable development.

Since their appointment on May 14, 1995, in Chihuahua, Chihuahua, the council's members have dedicated their time, and in many cases their resources, to facilitate and strengthen activities that promote sustainable development. Additionally they have developed communication links with the Central American councils, the United States Presidential Sustainable Development Council, and especially the Good Neighbor Environmental Board (GNEB), also of the United States.

Given the importance of the program in Region I, a permanent commission was created for following up with Border XXI. The commission was originally called "Borders and the Free Trade Agreement," and has since been changed to "International Affairs."

The commission has reported its progress and challenges faced during its regular sessions to the council. The commission has been responsible for coordination between the workgroup co-chairs and the President; organized public inquiry meetings to evaluate the draft document; participated in all organized meetings for discussing the program; and, on occasion, its members have been invited to private co-chair meetings of the nine workgroups. We recognize these activities as numerous opportunities afforded the advisors to attend meetings, comment on program content, and introduce ideas on the program.

The linkages developed with the GNEB in the United States are also important, as they have served to broaden the program's regional perspective by involving the border community and its representatives. The Region I advisory council has held two binational meetings with the GNEB; also, a representative of our counterpart is always invited to attend regular meetings.

The task is not complete; we would like to see that the future administration afford continuity to the program, given its vital importance in achieving sustainable development in the Northern Mexico border region.

ADVANCES IN ACHIEVING THE PROGRAM'S MISSION: PROMOTING SUSTAINABLE DEVELOPMENT

Accomplishments

In its evaluation of the Border XXI Program, the Region I Advisory Council for Sustainable Development is of the general opinion that progress has been made in promoting sustainable development in the border region, but this progress is insufficient. The majority of program activities have been more directed at containing damage to environmental and natural resources than to achieving sustainability.

With regard to this last aspect, the council recognizes significant advancement on the various workgroup projects, as follows: the Water Workgroup along with the BECC and NADB has improved sanitary infrastructure, especially with regard to wastewater treatment along the border, which has increased from 34 percent in 1995 to 81 percent in the year 2000; the Air Workgroup has improved air monitoring and completed air monitoring programs in Juárez, Mexicali, and Tijuana; the Environmental Health Workgroup has made efforts in the design and operation of the Clean Water in Homes program; the Environmental Information Resource Workgroup has established environmental indicators and developed the Reporte del Estado Ambiental y de los Recurso Naturales en la Frontera Norte de México (Report on the State of the Environment and Natural Resources in the Northern Border of Mexico); the progress made by the Natural Resources Workgroup in designing and operating management plans for various natural protected areas; and in general the effort of other workgroups in the areas of tracking hazardous wastes, emergency response, and enforcement and compliance.

Since its inception, the Border XXI Program has become a model for involving the community in sustainable development issues. The binational nature of the program in particular has allowed the resurgence of certain cultural values relating to the theme of caring for the common environment that applies to the communities on both sides of the border. It is important to note in this respect that our country has benefitted from the community participation process that has been encouraged binationally through Border XXI.

With respect to encouraging sustainable development, the council considers the relevant workshops that took place in 1999 in Reynosa, Tamaulipas; Linares, Nuevo León; Piedras Negras, Coahuila; Ciudad Juárez, Chihuahua; and in Nogales, Sonora, as very important to this process. These workshops represent an exciting way of working to involve the community, along with the three levels of government, in planning for sustainable development in these locations.

Deficiencies

The 1996 U.S.-Mexico Border XXI Program: Framework Document (Framework Document) deviated from the assumption that the proper functioning of the nine Border XXI workgroups in itself was sufficient for driving the process of promoting sustainable development in the region. In light of progress made, clearly this assumption was short sighted. It lacked an interinstitutional implementation strategy that would join collaboration from the three governmental levels with a wide community participation base to promote sustainable development at the local level in each community.

Other factors in Border XXI that limit the promotion of sustainable development include the following:

- The persistence of the centralized decision making structure
- The lack of interinstitutional participation at the federal level (that is, failure to involve other secretariats besides SEMARNAP, Secretaría de Salud [SSA, or Secretariat of Health] and the Secretaría de Desarrollo Social

[SEDESOL, or Secretariat of Social Development]).

- The lack of efficient mechanisms for intrasecretarial coordination (for example in SEMARNAP, with the decentralized organizations, federal delegations, etc.)
- Insufficient involvement and participation from state and municipal governments
- The need for an assigned budget in Mexico for the program
- The lack of mechanisms for information dissemination between the authorities responsible for the program and the local communities
- The absence of environmental educations at all levels, especially in the local communities

As a form of self criticism, the council has characterized the flow of Border XXI information from itself to the local communities as deficient.

Observations

- The principle of community participation is implicit to the concept of sustainable development. Clearly it is not possible to promote sustainable development without public involvement.
- Another central principle is reducing the decision-making level to achieve sustainable development. It is therefore implicit that environmental problem solving and natural resources stewardship must take place at the level of authority closest to the issue, which means increased participation at the state and municipal level.
- It is erroneous to believe that sustainable development is achieved with environmental policy, since the population's priority is to take care of its core needs, and does not perceive sustainable development to be a part. A governmental strategy to that end must tend to the tasks of fighting poverty and patrons of urban development in a holistic institutional arrangement.

EVALUATION OF THE PROGRAM'S THREE STRATEGIC AREAS

Public Participation

The council recognizes that the binational character of the program has enriched public participation on the border with mechanisms that have been new to Mexico. In 1995 and 1996, 10 public meetings (national and binational) were held along the border to receive public comment on the design phase of the program. The level of participation and public response was overwhelming.

The council agrees that the Border XXI Environmental Information Resources Workgroup made a tremendous effort to generate public information and to make it available to the public. In particular, the 1997 United States-Mexico Border Environmental Indicators Report (1997 Indicators Report), the Internet web page, and the Reporte del Estado Ambiental y de los Recurso Naturales en la Frontera Norte de México (Report on the State of the Environment and Natural Resources in the Northern Border of Mexico) represent a significant advance in providing the Mexican public with knowledge of the environmental reality on the border.

The council recognizes SEMARNAP and the U.S. Environmental Protection Agency's (EPA) efforts to include public comment in the first draft of Border XXI.

Despite the overwhelming public consultation at the beginning of the program, there was no continuity after 1996. In 1997 and 1998, inquiry declined significantly. Even so, the council admits that the forums held in the six border state to discuss environmental indicators in Border XXI were highly useful.

In terms of daily operation, Border XXI does not establish permanent participation mechanisms. The workgroups in particular have not involved the community. The national coordinators meetings have not been designed to facilitate public participation since the public comment periods have been largely insufficient.

The council recognizes that BECC has encouraged community participation, which for Mexico has been an important learning process. This binational institution has required community participation as a substantial requisite for project certification.

The council recognizes SEMARNAP and EPA's efforts to involve their respective councils.

Institutional Strengthening and Decentralization

One of the primary limitations of Border XXI relates to the few advances made with respect to decentralization, due to a variety of institutional, legal, and economic conflicts. SEMARNAP was confronted initially with obstacles to combining its diverse areas and the absence of a regulation lending it legal support, combined with bureaucratic inertia in certain areas of SEMARNAP decentralization activities. Meanwhile, the states had a wide variety of approaches to decentralization proposals, in some cases caused by a lack of motivation to (1) assume federal functions in some cases, and (2) strengthen state environmental management programs in others.

The pretense of transferring functions without transferring resources (which for SEMARNAP were extremely limited) to entities was perhaps one of the principal limitations for improving decentralization. The advance of some decentralization activities has produced various effects; Instituto Nacional de Ecología (INE, or National Institute of Ecology) and the Comisión Nacional del Agua (CNA, or National Water Commission), were able to implement projects with specific resources, the "Mega Secretary" created has not been able to define certain program goals due to a lack of resources.

Another force that restricted decentralization was Mexico's institutional structure that does not allow long-term program planning, but rather only in six-year terms.

In terms of institutional strengthening, the council recognizes INE's Environmental Management Strengthening Program, which has assigned equipment, training, and resources to state and certain municipal ecological offices. The assigned resources, however, were insufficient.

Interinstitutional Coordination

The council recognizes that the Border XXI Program has been an excellent framework for binational institutional coordination, especially at the federal level. The coordination among SEMARNAP, SSA, and SEDESOL in Mexico, and EPA, the Department of Health and Human Services (HHS), and the Department of the Interior (DOI)

in the United States, has provided an impetus for projects that have not been implemented under other circumstances (water, air, natural protected areas, pollution prevention, etc.).

At the same time, concrete Border XXI efforts of local institutions on both sides of the border, without federal involvement, are commended.

It serves to mention that Border XXI achieved the first connection with the six border states. As part of these coordination efforts, a work plan was established with themes such as a local Agenda 21, decentralization, industrial waste management, etc. These tasks, in conjunction with a variety of U.S. initiatives, paved the way for signing the coordination agreement between the National Coordinators (SEMARNAP and EPA) and the 10 border states in May 1999. The council believes that the agreement needs to be more detailed and put into operation. Border XXI has not promoted specific coordination instruments at the municipal level.

Border XXI's intent to create local, binational work subgroups that was set forth in the Framework Document, was limiting to certain workgroups, such as the Cooperative Enforcement and Compliance and the Natural Resources Workgroups. This undoubtedly limited program coordination at the state and municipal level.

The council believes that Border XXI coordination with the organizations created by NAFTA is insufficient. While BECC and NADB worked with the committee coordinator to that end, major interaction was lacking on occasion. Also, Border XXI had hardly any relation to the Commission for Environmental Cooperation projects. As a result of the lack of electronic infrastructure in Mexican border communities, access to available information generated by those institutions developed through NAFTA was deficient.

Widespread resistance to change at the heart of Mexican federal institutions impedes improved communication. Mexico fails to insist on lateral cooperation from the workgroups, and Border XXI activities have not been integrated in those of U.S. border entities and institutions.

GENERAL PENDING OR ABSENT THEMES

The Framework Document establishes good intended achievements, but little detail in terms of goals, time frames for their achievement, responsibilities, and resources. That is, general objectives for each workgroup are established, but the program does not identify specific milestones to measure progress toward achievements. In this sense, the objectives lacked a numerical base to measure the level of commitment the program expected from each workgroup, thereby limiting possibilities for monitoring and evaluation. This was not the case for the Water Workgroup, which established goals and shared them with the public.

The 1997 environmental indicators established a baseline for measuring the condition of the environment, natural resources, and the program's environmental management, but the indicators were not extrapolated to project goals for the year 2000.

From the Mexican side, the problems discussed previously were the result of a lack of budget for the program. Each workgroup operated on generic resources appropriated to its associated entity, without budget allocations labeled ad hoc. This fault prevented direct assignment of resources to the program on an annual basis.

In Mexico, Border XXI did not promote special collaboration with indigenous peoples, as occurred in the United States. These groups represent an important voice that should be consulted for border environmental management.

Border XXI also failed to significantly include and involve the private sector in its operation. The council recognized a few isolated group activities, particularly with the Cooperative Enforcement and Compliance and Pollution Prevention Workgroups, but the program did not reach representative organizations.

Certain Mexican and U.S. coastal resources in the border region have not been addressed by the program. Guidelines with respect to marine resources do appear in the Border XXI program; however, no projects or specific actions have been assigned.

Border XXI has not been able to link scientific research projects under way in border area universities and research institutes to its environmental management activities. Environmental education was clearly absent in Border XXI. Despite the Environmental Information Resources Workgroup's intent to make headway in this area, it did not become a part of any of its projects. At the same time, the council believes that the program presented insufficient information dissemination mechanisms by limiting them to electronic media, with the majority of Mexico's border population having limited access.

PRINCIPAL RECOMMENDATIONS FOR THE NEW PHASE OF BORDER ENVIRONMEN-TAL MANAGEMENT (2001–2006)

The CCDS recommendations for the new phase of border environmental management are as follows:

General Recommendations

- Establish up-front, concrete goals for the program, along with time frames for implementation, responsibilities, and resources.
- The goals should center on all levels of improvement in the main program categories (water, air, natural resources, solid and hazardous waste, and environmental compliance), as well as in strategic areas such as decentralization, institutional strengthening, community participation, and environmental education and information.
- Border XXI must become a priority program for SEMARNAP. This need translates to assigning specific resources and a dedicated budget.
- Border XXI should make a greater effort to make priorities established by the Environmental Health Workgroup a framework for priority action in the other workgroups, thereby establishing lateral integration.
- Additional effort should be made in the area of decentralization, involving states from the beginning in the planning efforts for the new phase.
- The council recommends that Mexican indigenous groups be recognized as important voices to the program and be included in the next binational planning phase.

- A binational workgroup for involving the private sector should be created paralleling existing workgroups, to include representatives from the hazardous waste, pollution prevention, emergency response and contigency planning, and enforcement workgroups. This step will be recommended by the Region I CCDS which will seek the support of the GNEB.
- Environmental indicators in coastal areas should be established in Border XXI to preserve marine resources.
- Scientific research must be included with environmental management in the framework for the Border XXI Program:
 - Workgroups should be encouraged to consider methods for including research into the program.
 - Communication with research institutions should be evaluated for sending pertinent projects to the Border XXI Program.
 - SEMARNAP and leading universities in the norther border region should sign a cooperative agreement to encourage research on border issues.
 - The council calls on SEMARNAP to create research projects that would support Border XXI program tasks.
- The CCDS International Affairs Commission should meet at least once a year with the co-chairs of the program workgroups.

Recommendations on Sustainable Development Issues

- Encourage more decentralization, community participation, and local involvement.
- Involve other federal governmental agencies to develop a common strategy for sustainability in the region.
- Strengthen border-area antipoverty programs.
- Design instruments and projects to tailor the level of

sustainable development promotion to each locality, with individual involvement from municipal authorities.

- Environmental education must be an integral part of the sustainable development concept, which implies the use, management, and conservation of natural resources and the environment.
- Involve more SEMARNAP delegations in the promotion of sustainable development, and include other entities that work in this area (nongovernmental organizations [NGO], universities, etc.).
- Identify mechanisms for improving the flow of Border XXI information from SEMARNAP and the CCDS to the local communities.

Recommendations for Public Participation

- Two offices should be created in Mexico's border states to strengthen public participation in the region.
- The dynamics of the work within the Border XXI Program, as much within the workgroups as well as the national coordinators, should be more efficient at encouraging public participation. In particular, the national coordinators' meetings should be open to the public, and should be preceded by public comment forums for discussing basic documents, to improve dissemination of the program.
- Encourage public participation as permanent members of the workgroups and sub-workgroups.
- The border has significant social organizational structure, which has great potential due to its binational nature. This structure represents a challenge, but also a tremendous opportunity for public participation.
- Identify mechanisms for improving public access to the information created by the NAFTA institutions.

Recommendations for Decentralization

- States and municipalities must be given the authority, attributes, and resources to implement the Border XXI Program.
- Additional effort must be made to decentralize environmental management until it reaches the municipal level. Sustainable development cannot exist without decentralization, and problems must be solved at the level closest to the issue.
- INE should continue its institutional strengthening program.
- Municipal environmental management capacity must be especially strengthened.
- State and municipal environmental authorities should be encouraged to lead the subworkgroups.
- The advisory councils on both sides of the border should be included in the workgroups so that the program as a whole can be more goal oriented.
- In terms of institutional strengthening, the advisory councils should be included, along with state and municipal authorities, as the councils are most representative of public participation.

Recommendations for Interinstitutional Coordination

- A priority strategy for establishing regional subworkgroups is recommended to lend local perspective and to integrate the three levels of government.
- The subworkgroups should not be limited to environmental management institutions; rather, they should include other entities that could play an important part in promoting sustainable development.
- Lateral cooperation should be promoted among the Mexican institutions that operate Border XXI.

- Now that the new secretariat has been consolidated, SEMARNAP should propose a more efficient distribution of competencies, naming a co-chair for each workgroup.
- Mechanisms for evaluating environmental management in Border XXI mush be created and strengthened, as this is one of the program's weaknesses.

Finally, the council would especially like to recognize the efforts made by the Environmental Information Resources Workgroup for having led the effort to develop environmental indicators.

The council also wishes to recognize the efforts of Mr. Abraham Nehmad, Director of International Affairs, SEMARNAP, and Mr. Rolando Ríos, Director of General Management and Environmental Information, INE.

The CCDS International Affairs Commission met on October 7 and 8, 1999 in Tijuana, Baja California, to evaluate the Border XXI Program.

In addition to the council members, Mr. Abraham Nehmad, Director of Border Affairs, SEMARNAP, and Mr. Rolando Ríos, Director of Environmental Information, INE, were present.

The council made a series of recommendations relating to the program, outlined in the document to be presented at the 15th regular council session. The general proposals are enumerated in this document.

Participating Council Members

- Arq. Oscar Romo (Baja California Academic Sector)
- Ing. Mario Alberto Vazquez (Tamaulipas NGO Sector)
- Lic. Cruz Porto Ramirez (Coahuila NGO Sector)
- Lic. Jesus Rafael Ruvalcaba (Sinaloa Social Sector)
- Sr. José Andrés Suarez (Tamaulipas Academic Sector)
- C.P. Gilberto Reyna (Nuevo León Social Sector)
- Sr. Oscar Arizpe (Baja California Sur NGO Sector)
- Arq. Virginia Reyes Flores (Sonora NGO Sector)
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